

DATE: Thursday, April 10, 2003 Printable Copy Create Case

Set Name	Query	Hit Count	Set Name
side by side	· · · · · · · · · · · · · · · · · · ·		result set
DB = USP	T,PGPB,JPAB,EPAB,DWPI,TDBD; PLUR=YES; OP=OR		
<u>L8</u>	E3L near20 attenua\$	2	<u>L8</u>
<u>L7</u>	E3L near10 attenua\$	2	<u>L7</u>
<u>L6</u>	13 and vaccinia near10 expression near5 vector\$	3	<u>L6</u>
<u>L5</u>	13 and expression near5 vector\$	4	<u>L5</u>
<u>L4</u>	L2 and apathogen\$	0	<u>L4</u>
<u>L3</u>	L2 and (reduc\$ or alter\$) near10 pathogen\$	8	<u>L3</u>
$\overline{\text{L2}}$	L1 and E3L near10 delet\$	14	<u>L2</u>
L1	vaccinia and E3L	46	<u>L1</u>

END OF SEARCH HISTORY

Generate Collection

Print

Search Results - Record(s) 1 through 14 of 14 returned.

1. 20030013076 . 02 Mar 01. 16 Jan 03. Parapoxvirus vectors. Robinson, Anthony J., et al. 435/5; 435/320.1 435/325 530/351 536/23.5 536/23.7 536/23.72 C12N015/00 C12Q001/70 C07H021/04 C12N015/09 C07K001/00 C07K014/00 C07K017/00 C12N005/00 C12N015/74.
2. 20020187465 . 01 May 02. 12 Dec 02. Viruses for the treatment of cellular proliferative disorders. Coffey, Matthew C., et al. 435/5; 435/235.1 435/91.1 536/23.72 C12Q001/70 C07H021/04 C12P019/34 C12N007/00 C12N007/01.
3. 20020155529 . 19 Apr 01. 24 Oct 02. Viral vectors having reduced virulence. Jacobs, Bertram, et al. 435/69.1; 435/320.1 435/456 C12P021/02 C12N015/86.
4. 20020110565 . 22 Jun 01. 15 Aug 02. Viral vectors having enhanced effectiveness with reduced virulence. Jacobs, Bertram, et al. 424/199.1; 424/232.1 424/93.2 435/235.1 435/320.1 435/456 A61K048/00 A61K039/12 C12N015/86 C12N007/00 A01N063/00 A61K039/275 A61K039/285 C12N007/01 C12N015/00 C12N015/09 C12N015/63 C12N015/70 C12N015/74.
5. 20020061298. 15 Nov 01. 23 May 02. Method for optimally delivering virus to a solid tumor mass. Coffey, Matthew C., et al. 424/93.21; 435/235.1 A61K048/00 C12N007/01.
6. 20020028195 . 28 Sep 01. 07 Mar 02. Viruses for the treatment of cellular proliferative disorders. Coffey, Matthew C., et al. 424/93.21; 424/131.1 424/231.1 424/464 435/235.1 514/9 536/23.72 A61K048/00 A61K039/395 A61K038/13 C07H021/04 A01N063/00 C12N007/00.
7. 20010048919 . 03 May 01. 06 Dec 01. Virus clearance of neoplastic cells from mixed cellular compositions. Morris, Donald, et al. 424/93.21; 435/372 435/456 A61K048/00 C12N005/08 C12N015/86.
8. 6372455 . 19 Apr 01; 16 Apr 02. Recombinant vaccinia viral vectors. Jacobs; Bertram, et al. 435/69.1; 435/320.1 435/5 536/23.72. C12P021/06 C12Q001/70 C12N015/00 C07H021/04.
9. 6130066 . 15 May 98; 10 Oct 00. Vectors having enhanced expression and methods of making and uses thereof. Tartaglia; James, et al. 435/69.1; 435/320.1 435/91.41 536/23.72. C12P021/06.
☐ 10. 6004777. 12 Mar 97; 21 Dec 99. Vectors having enhanced expression, and methods of making and uses thereof. Tartaglia; James, et al. 435/69.1; 435/320.1 435/91.41 536/23.1 536/23.72. C12P021/00 C12N015/63 C12N015/66 C12N015/11.
11. <u>5990388</u> . 07 Jun 95; 23 Nov 99. Resistance to viruses and viroids in transgenic plants and animals expressing dsRNA-binding protein. Roth; Don Allen, et al. 800/301; 435/320.1 800/280 800/317.2 800/317.3. C12N005/00 C12N015/00 A01H001/04.
12. <u>5990091</u> . 12 Mar 97; 23 Nov 99. Vectors having enhanced expression, and methods of making and uses thereof. Tartaglia; James, et al. 514/44; 424/93.2 435/320.1 435/69.1 435/91.4 435/91.41. C12N015/67 C12N015/86 A61K048/00.
13. WO 200073487 A1 US 20020110565 A1. Vaccinia virus with amino acids deleted from the E3L gene product, which reduces virulence and improves efficacy, useful as a vaccine. BRANDT, T A, et al. A01N063/00 A61K039/12 A61K039/275 A61K039/285 A61K048/00 C07H021/02 C07H021/04

C12N007/00 C12N007/01 C12N015/00 C12N015/09 C12N015/39 C12N015/63 C12N015/64 C12N015/70 C12N015/74 C12N015/86 C12P021/06.

 \square 14. WO 9955910 A1 . Inducing apoptosis in a target cell useful for treating cancer. JACOBS, B L. A61K048/00 C07H021/02 C07H021/04 C12N015/85 C12N015/86 C12Q001/68.

Generate Collection Print

Terms	Documents
L1 and E3L near10 delet\$. 14

Previous Page Next Page

? set hi ;set hi
HILIGHT set on as ''
HILIGHT set on as ''
? begin 5,6,55,154,155,156,312,399,biotech,biosci
>>> 135 is unauthorized

```
Set Items Description
          ____
? s E3L (10n) attenuat?
             500 E3L
          772815 ATTENUAT?
               1 E3L (10N) ATTENUAT?
      S1
? d s1/9/1
                        (Item 1 from file: 399)
      Display 1/9/1
DIALOG(R) File 399:CA SEARCH(R)
(c) 2003 American Chemical Society. All rts. reserv.
                                   JOURNAL
  130033656
               CA: 130(4)33656z
  Analysis of genomic rearrangement and subsequent gene deletion of the
attenuated Orf virus strain D1701
  AUTHOR(S): Cottone, Rosita; Buttner, Mathias; Bauer, Berthilde; Henkel,
Marco; Hettich, Eduard; Rziha, Hanns-Joachim
  LOCATION: Federal Research Centre for Virus Diseases of Animals,
Institute For Vaccines, Tubingen, Germany, D-72076
  JOURNAL: Virus Res. DATE: 1998 VOLUME: 56 NUMBER: 1 PAGES: 53-67
  CODEN: VIREDF ISSN: 0168-1702 PUBLISHER ITEM IDENTIFIER:
0168-1702(98)00056-2 LANGUAGE: English PUBLISHER: Elsevier Science B.V.
  SECTION:
CA203003 Biochemical Genetics
CA206XXX General Biochemistry
CA210XXX MICROBIAL, ALGAL, AND FUNGAL BIOCHEMISTRY
  IDENTIFIERS: Orf virus deletion rearrangement attenuation E2L
  DESCRIPTORS:
                                    -more-
      Display 1/9/1
                        (Item 1 from file: 399)
DIALOG(R) File 399:CA SEARCH(R)
(c) 2003 American Chemical Society. All rts. reserv.
Deletion (mutation) ... DNA sequences... Orf virus... Protein sequences...
Rearrangement (genetic) ...
    anal. of genomic rearrangement and subsequent gene deletion of
    attenuated Orf virus strain D1701
Genes (microbial) ...
    early, E3L; anal. of genomic rearrangement and subsequent gene deletion
    of attenuated Orf virus strain D1701
Genes (microbial) ...
    E2L; nonessential for virus replication; anal. of genomic rearrangement
    and subsequent gene deletion of attenuated Orf virus strain D1701
Proteins (specific proteins and subclasses)...
    gene E3L; anal. of genomic rearrangement and subsequent gene deletion
    of attenuated Orf virus strain D1701
Proteins (specific proteins and subclasses)...
    gene G1L; anal. of genomic rearrangement and subsequent gene deletion
    of attenuated Orf virus strain D1701
Duplication (mutation) ...
                                    -more-
?
      Display 1/9/1
                        (Item 1 from file: 399)
DIALOG(R) File 399:CA SEARCH(R)
(c) 2003 American Chemical Society. All rts. reserv.
    genomic ends of D1701 are duplicated; anal. of genomic rearrangement
    and subsequent gene deletion of attenuated Orf virus strain D1701
Transcription(genetic)...
    G1L and E3L genes transcribed in D1701; anal. of genomic rearrangement
    and subsequent gene deletion of attenuated Orf virus strain D1701
Genes (microbial) ...
```

```
G1L; anal. of genomic rearrangement and subsequent gene deletion of
    attenuated Orf virus strain D1701
Inverted repeat (DNA) ...
    terminal; anal. of genomic rearrangement and subsequent gene deletion
    of attenuated Orf virus strain D1701
  CAS REGISTRY NUMBERS:
216438-88-9 216500-08-2 amino acid sequence; anal. of genomic
    rearrangement and subsequent gene deletion of attenuated Orf virus
    strain D1701
206685-20-3 nucleotide sequence; anal. of genomic rearrangement and
    subsequent gene deletion of attenuated Orf virus strain D1701
                                 - end of display -
>>>Page beyond end of display invalid
? s E3L and (apathogen? or vaccine? or attenuat?
>>>Unmatched parentheses
? s E3L and (vaccine? or apathogen? or attenuat?)
Processing
Processed 10 of 34 files ...
Completed processing all files
             500 E3L
          650922 VACCINE?
            2269 APATHOGEN?
          772815 ATTENUAT?
              57 E3L AND (VACCINE? OR APATHOGEN? OR ATTENUAT?)
      S2
? rd s2
...examined 50 records (50)
...completed examining records
      S3
            25 RD S2 (unique items)
? d s3/3/1-25
                        (Item 1 from file: 5)
      Display 3/3/1
              5:Biosis Previews(R)
DIALOG(R) File
(c) 2003 BIOSIS. All rts. reserv.
13512650 BIOSIS NO.: 200200141471
Expression of vaccinia E3L and K3L genes by a novel recombinant
  canarypox HIV vaccine vector enhances HIV-1 pseudovirion production
  and inhibits apoptosis in human cells.
AUTHOR: Fang Zhi-Yu; Limbach Keith; Tartaglia James; Hammonds Jason; Chen
  Xuemin; Spearman Paul(a)
AUTHOR ADDRESS: (a) Pediatric Infectious Diseases, Vanderbilt University
  School of Medicine, D-7235 MCN, Nashville, TN, 37232-2581**USA E-Mail:
  paul.spearman@mcmail.vanderbilt.edu
JOURNAL: Virology 291 (2):p272-284 December 20, 2001
MEDIUM: print
ISSN: 0042-6822
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English
                                 - end of record -
                        (Item 2 from file: 5)
      Display 3/3/2
DIALOG(R) File 5: Biosis Previews(R)
(c) 2003 BIOSIS. All rts. reserv.
13024732
           BIOSIS NO.: 200100231881
Vectors having enhanced expression and methods of making and uses thereof.
AUTHOR: Tartaglia James; Cox William I; Gettig Russell Robert; Martinez
  Hector(a); Paoletti Enzo; Pincus Steven E
AUTHOR ADDRESS: (a) Menands, NY**USA
JOURNAL: Official Gazette of the United States Patent and Trademark Office
```

Patents 1239 (2):pNo Pagination Oct. 10, 2000 MEDIUM: e-file ISSN: 0098-1133 DOCUMENT TYPE: Patent RECORD TYPE: Abstract LANGUAGE: English - end of record -? d s3/9/1-24 (Item 1 from file: 5) Display 3/9/1 5:Biosis Previews(R) DIALOG(R)File (c) 2003 BIOSIS. All rts. reserv. 13512650 BIOSIS NO.: 200200141471 Expression of vaccinia E3L and K3L genes by a novel recombinant canarypox HIV vaccine vector enhances HIV-1 pseudovirion production and inhibits apoptosis in human cells. AUTHOR: Fang Zhi-Yu; Limbach Keith; Tartaglia James; Hammonds Jason; Chen Xuemin; Spearman Paul(a) AUTHOR ADDRESS: (a) Pediatric Infectious Diseases, Vanderbilt University School of Medicine, D-7235 MCN, Nashville, TN, 37232-2581**USA E-Mail: paul.spearman@mcmail.vanderbilt.edu JOURNAL: Virology 291 (2):p272-284 December 20, 2001 MEDIUM: print ISSN: 0042-6822 DOCUMENT TYPE: Article RECORD TYPE: Abstract LANGUAGE: English -more-(Item 1 from file: 5) Display 3/9/1 DIALOG(R) File 5:Biosis Previews(R) (c) 2003 BIOSIS. All rts. reserv. ABSTRACT: Poxviruses that are attenuated for growth in human cells provide a safe means of HIV antigen expression and are capable of eliciting HIV-specific immune responses, including CD8+ cytotoxic T-lymphocyte (CTL) responses. HIV-1 antigen expression in human cells by attenuated poxvirus vectors may be limited by interferon-mediated host defense mechanisms. To enhance HIV antigen expression in human cells, the vaccinia virus E3L and K3L genes were inserted into a canarypox vector that expresses HIV-1 Gag, Env, and a Nef/Pol polyepitope string. E3L and K3L markedly reduced the activation of the double-stranded RNA-dependent protein kinase, PKR, and led to a significant reduction in apoptosis in HeLa cells. Production and release of HIV-1 antigen in the form of pseudovirions was enhanced in both duration and magnitude by this vector modification. The addition of immunomodulatory genes to attenuated poxviruses represents a novel strategy for enhancing antigen production by live vector HIV vaccine candidates. -more-(Item 1 from file: 5) Display 3/9/1 DIALOG(R) File 5:Biosis Previews(R) (c) 2003 BIOSIS. All rts. reserv. DESCRIPTORS: MAJOR CONCEPTS: Cell Biology; Molecular Genetics (Biochemistry and Molecular Biophysics) BIOSYSTEMATIC NAMES: Galliformes--Aves, Vertebrata, Chordata, Animalia; Hominidae--Primates, Mammalia, Vertebrata, Chordata, Animalia; Poxviridae -- Animal Viruses, Viruses, Microorganisms; Retroviridae --Animal Viruses, Viruses, Microorganisms

```
ORGANISMS: HIV-1 (Retroviridae); HeLa cell line (Hominidae)--host, human
   cervical carcinoma cells; canarypox (Poxviridae) -- gene vector;
   chicken (Galliformes) -- host; vaccinia virus (Poxviridae)
 ORGANISMS: PARTS ETC: cytotoxic T-lymphocyte--blood and lymphatics,
    immune system
 BIOSYSTEMATIC CLASSIFICATION (SUPER TAXA): Animal Viruses; Animals; Birds
    ; Chordates; Humans; Mammals; Microorganisms; Nonhuman Vertebrates;
   Primates; Vertebrates; Viruses
                             Env protein; Gag protein; HIV antigen--
 CHEMICALS & BIOCHEMICALS:
   expression; HIV vaccine--immunologic-drug, immunostimulant-drug
                                    -more-
?
      Display 3/9/1
                        (Item 1 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2003 BIOSIS. All rts. reserv.
  GENE NAME: vaccinia virus E3L gene (Poxviridae); vaccinia virus K3L
   gene (Poxviridae
                        apoptosis; pseudovirion production
 MISCELLANEOUS TERMS:
CONCEPT CODES:
          Cytology and Cytochemistry-General
  02502
          Cytology and Cytochemistry-Animal
  02506
          Cytology and Cytochemistry-Human
  02508
  03502
          Genetics and Cytogenetics-General
          Genetics and Cytogenetics-Animal
  03506
          Genetics and Cytogenetics-Human
  03508
          Pathology, General and Miscellaneous-Therapy (1971-)
  12512
          Blood, Blood-Forming Organs and Body Fluids-Blood and Lymph
  15002
          Blood, Blood-Forming Organs and Body Fluids-Blood Cell Studies
  15004
          Pharmacology-Clinical Pharmacology (1972-)
  22005
          Pharmacology-Immunological Processes and Allergy
  22018
          Genetics of Bacteria and Viruses
  31500
                                    -more-
      Display 3/9/1
                       (Item 1 from file: 5)
DIALOG(R) File 5: Biosis Previews (R)
(c) 2003 BIOSIS. All rts. reserv.
  33506
          Virology-Animal Host Viruses
          Immunology and Immunochemistry-General; Methods
BIOSYSTEMATIC CODES:
          Poxviridae (1993-)
  02621
          Retroviridae (1993- )
  02623
  85536
          Galliformes
  86215
          Hominidae
                                 - end of record -
      Display 3/9/2
                        (Item 2 from file: 5)
DIALOG(R)File
              5:Biosis Previews(R)
(c) 2003 BIOSIS. All rts. reserv.
           BIOSIS NO.: 200100231881
13024732
Vectors having enhanced expression and methods of making and uses thereof.
AUTHOR: Tartaglia James; Cox William I; Gettig Russell Robert; Martinez
  Hector(a); Paoletti Enzo; Pincus Steven E
AUTHOR ADDRESS: (a) Menands, NY**USA
JOURNAL: Official Gazette of the United States Patent and Trademark Office
Patents 1239 (2):pNo Pagination Oct. 10, 2000
MEDIUM: e-file
PATENT NUMBER: US 6130066 PATENT DATE GRANTED: October 10, 2000 20001010
PATENT ASSIGNEE: Virogenetics Corporation PATENT COUNTRY: USA
```

ISSN: 0098-1133 DOCUMENT TYPE: Patent RECORD TYPE: Abstract LANGUAGE: English ABSTRACT: Disclosed and claimed are vectors having enhanced expression and -more-(Item 2 from file: 5) Display 3/9/2 DIALOG(R) File 5: Biosis Previews(R) (c) 2003 BIOSIS. All rts. reserv. methods for making and using them. Enhancement of expression is from substantially co-temporal expression of at least one first nucleic acid molecule and at least one second nucleic acid molecule. The second nucleic acid molecule encodes a transcription factor or a translation factor or a transcription factor and a translation factor. The contemporaneous expression can be from operably linking the first and second nucleic molecules to a single promoter, or from operably linking the first nucleic acid molecule to a first promoter and the second nucleic molecule to a second promoter wherein the first and second promoters function substantially contemporaneously. Thus, the first and second nucleic acid molecules can be at the same locus in the vector, or at different loci. The second nucleic acid molecule can encode: one transcription factor or more than one transcription factor; or one translation factor or more than one translation factor; or at least one transcription factor and at least one translation factor. The transcription factor can be from vaccinia H4L, D6, A7, G8R, A1L, A2L, H5R, or combinations thereof. The translation factor can be from a K3L -more-? Display 3/9/2 (Item 2 from file: 5) DIALOG(R)File 5:Biosis Previews(R) (c) 2003 BIOSIS. All rts. reserv. open reading frame, an E3L open reading frame, a VAI RNA, an EBER RNA, a sigma 3 open reading frame, a TRBP open reading frame, or combinations thereof. The vector can be a poxvirus such as an attenuated poxvirus, e.g., NYVAC, or ALVAC. DESCRIPTORS: MAJOR CONCEPTS: Molecular Genetics (Biochemistry and Molecular Biophysics); Chemistry BIOSYSTEMATIC NAMES: Poxviridae--Animal Viruses, Viruses, Microorganisms ORGANISMS: poxvirus (Poxviridae) -- genetically modified BIOSYSTEMATIC CLASSIFICATION (SUPER TAXA): Animal Viruses; Microorganisms ; Viruses gene vector MISCELLANEOUS TERMS: BIOSYSTEMATIC CODES: Poxviridae (1993-) 02621 - end of record -Display 3/9/3 (Item 3 from file: 5) DIALOG(R) File 5: Biosis Previews(R) (c) 2003 BIOSIS. All rts. reserv. BIOSIS NO.: 200100081753 12874604 Both carboxy- and amino-terminal domains of the vaccinia virus interferon resistance gene, E3L, are required for pathogenesis in a mouse

model.

AUTHOR: Brandt Teresa A; Jacobs Bertram L(a)

AUTHOR ADDRESS: (a) Department of Microbiology, Graduate Program in

```
Molecular and Cellular Biology, Arizona State University, Tempe, AZ,
  85287-2701: bjacobs@asu.edu**USA
JOURNAL: Journal of Virology 75 (2):p850-856 January, 2001
MEDIUM: print
ISSN: 0022-538X
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English
SUMMARY LANGUAGE: English
                                    -more-
?
      Display 3/9/3
                        (Item 3 from file: 5)
               5:Biosis Previews(R)
DIALOG(R) File
(c) 2003 BIOSIS. All rts. reserv.
ABSTRACT: The vaccinia virus (VV) E3L gene is responsible for
  providing interferon (IFN) resistance and a broad host range to VV in
  cell culture. The E3L gene product contains two distinct domains. A
  conserved carboxy-terminal domain, which is required for the IFN
  resistance and broad host range of the virus, has been shown to bind
  double-stranded RNA (dsRNA) and inhibit the antiviral dsRNA-dependent
  protein kinase, PKR. The amino-terminal domain, while conserved among
  orthopoxviruses, is dispensable in cell culture. To study the role of
  E3L in whole-animal infections, WR strain VV recombinants either
  lacking E3L (VVDELTAE3L) or expressing an amino-terminal
  (VVE3LDELTA83N) or carboxy-terminal (VVE3LDELTA26C) truncation of
  E3L were constructed. Whereas wild-type VV had a 50% lethal dose of
  approximately 104 PFU after intranasal infection, and elicited severe
  weight loss and morbidity, VVDELTAE3L was apathogenic, leading to
  no death, weight loss, or morbidity. VVDELTAE3L was also
  apathogenic after intracranial injection. Although the
  amino-terminal domain of E3L is dispensable for infection of cells
                                    -more-
      Display 3/9/3
                        (Item 3 from file: 5)
              5:Biosis Previews(R)
DIALOG(R) File
(c) 2003 BIOSIS. All rts. reserv.
  in culture, both the amino- and carboxy-terminal domains of E3L
  were required for full pathogenesis in intranasal infections. These
  results demonstrate that the entire E3L gene is required for
  pathogenesis in the mouse model.
DESCRIPTORS:
  MAJOR CONCEPTS: Molecular Genetics (Biochemistry and Molecular
    Biophysics); Infection
  BIOSYSTEMATIC NAMES: Muridae--Rodentia, Mammalia, Vertebrata, Chordata,
    Animalia; Poxviridae--Animal Viruses, Viruses, Microorganisms
  ORGANISMS: mouse (Muridae) -- animal model, host; vaccinia virus
    (Poxviridae) -- pathogen
  BIOSYSTEMATIC CLASSIFICATION (SUPER TAXA): Animal Viruses; Animals;
    Chordates; Mammals; Microorganisms; Nonhuman Mammals; Nonhuman
    Vertebrates; Rodents; Vertebrates; Viruses
  DISEASES: vaccinia virus infection--viral disease
  CHEMICALS & BIOCHEMICALS: PKR--antiviral double-stranded RNA-dependent
                                    -more-
      Display 3/9/3
                        (Item 3 from file: 5)
DIALOG(R)File
              5:Biosis Previews(R)
(c) 2003 BIOSIS. All rts. reserv.
    protein kinase; double-stranded RNA; interferon
  GENE NAME: mouse E3L gene (Muridae) -- amino-terminal domains,
```

```
carboxy terminal domains, interferon resistance gene
 MISCELLANEOUS TERMS: pathogenesis
CONCEPT CODES:
         Medical and Clinical Microbiology-Virology
  36006
         Genetics and Cytogenetics-General
  03502
         Genetics and Cytogenetics-Animal
  03506
         Biochemical Studies-Nucleic Acids, Purines and Pyrimidines
  10062
         Biochemical Studies-Proteins, Peptides and Amino Acids
  10064
         Genetics of Bacteria and Viruses
  31500
         Virology-Animal Host Viruses
  33506
BIOSYSTEMATIC CODES:
         Poxviridae (1993-)
  02621
  86375
         Muridae
                                 - end of record -
      Display 3/9/4
                        (Item 4 from file: 5)
DIALOG(R) File 5: Biosis Previews(R)
(c) 2003 BIOSIS. All rts. reserv.
          BIOSIS NO.: 199800479076
Analysis of genomic rearrangement and subsequent gene deletion of the
  attenuated Orf virus strain D1701.
AUTHOR: Cottone Rosita; Buettner Mathias; Bauer Berthilde; Henkel Marco;
  Hettich Eduard; Rziha Hanns-Joachim(a)
AUTHOR ADDRESS: (a) Federal Res. Cent. Virus Dis. Anim., Inst. Vaccines,
  Paul-Ehrlich-Str. 28, D-72076 Tuebingen**Germany
JOURNAL: Virus Research 56 (1):p53-67 July, 1998
ISSN: 0168-1702
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English
ABSTRACT: The orf virus (OV) strain D1701 belongs to the genetically
  heterogenous parapoxvirus (PPV) genus of the family Poxviridae. The
  attenuated OV D1701 has been licensed as a live vaccine
                                    -more-
      Display 3/9/4
                        (Item 4 from file: 5)
DIALOG(R) File 5:Biosis Previews(R)
(c) 2003 BIOSIS. All rts. reserv.
  against contagious ecthyma in sheep. Detailed knowledge on the genetic
  structure and organization of this PPV vaccine strain is an
  important prerequisite to reveal possible genetic mechanisms of PPV
  attenuation. The present study demonstrates a genomic map of the
  approximately 158 kbp DNA of OV D1701 established by hybridization
  studies of cloned restriction fragments covering the complete viral
  genome. The results show an enlargement of the inverted terminal repeats
  (ITR) to up to 18 kbp due to recombination between nonhomologous
  sequences during cell culture adaptation. DNA sequencing of the region
  adjacent to the ITR junction revealed the absence of one open reading
  frame designated E2L. In contrast to a transposition-deletion variant of
  the New Zealand OV strain NZ2 (Fleming et al., 1995) the two genes
  E3L (a homologue of dUTPase) and GIL neighboring E2L are retained
  in OV D1701. DNA and RNA analyses proved the presence of E2L gene in
  wild-type OV isolated directly from scab material. The data presented
  indicate that the E2L gene is nonessential for virus replication in vitro
  and in vivo, and may represent one important viral gene in determining
```

```
5:Biosis Previews(R)
DIALOG(R)File
(c) 2003 BIOSIS. All rts. reserv.
  virulence and pathogenesis of OV.
DESCRIPTORS:
  MAJOR CONCEPTS: Molecular Genetics (Biochemistry and Molecular
    Biophysics); Virology
  BIOSYSTEMATIC NAMES: Poxviridae--Animal Viruses, Viruses, Microorganisms
  ORGANISMS: Orf virus (Poxviridae) -- strain-D1701
  BIOSYSTEMATIC CLASSIFICATION (SUPER TAXA): Animal Viruses; Microorganisms
    ; Viruses
  CHEMICALS & BIOCHEMICALS:
                              E2L gene
  METHODS & EQUIPMENT: genomic mapping-gene mapping method
                        amino acid sequence; gene deletion; nucleotide
 MISCELLANEOUS TERMS:
    sequence; viral genomic rearrangement; viral replication
CONCEPT CODES:
          Genetics of Bacteria and Viruses
  31500
          Virology-Animal Host Viruses
BIOSYSTEMATIC CODES:
                                    -more-
?
      Display 3/9/4
                        (Item 4 from file: 5)
DIALOG(R) File 5: Biosis Previews(R)
(c) 2003 BIOSIS. All rts. reserv.
        Poxviridae (1993-)
  02621
                                 - end of record -
      Display 3/9/5
                        (Item 1 from file: 399)
DIALOG(R) File 399:CA SEARCH(R)
(c) 2003 American Chemical Society. All rts. reserv.
               CA: 137(21)309607p
                                     PATENT
  137309607
  Vaccinia viral vectors having reduced virulence
  INVENTOR (AUTHOR): Jacobs, Bertram; Langland, Jeffrey; Vijaysri, Sangeetha
  LOCATION: USA
  ASSIGNEE: Arizona Board of Regents
  PATENT: U.S. Pat. Appl. Publ. ; US 20020155529 A1 DATE: 20021024
  APPLICATION: US 837998 (20010419)
  PAGES: 8 pp. CODEN: USXXCO LANGUAGE: English CLASS: 435069100;
C12P-021/02A; C12N-015/86B
  SECTION:
CA216002 Fermentation and Bioindustrial Chemistry
CA203XXX Biochemical Genetics
CA263XXX Pharmaceuticals
  IDENTIFIERS: Vaccinia viral vector reduced virulence gene E3L
  DESCRIPTORS:
Gene, microbial...
                                     -more-
      Display 3/9/5
                        (Item 1 from file: 399)
DIALOG(R) File 399:CA SEARCH(R)
(c) 2003 American Chemical Society. All rts. reserv.
    .DELTA.7C; vaccinia viral vectors having reduced virulence
Gene, microbial...
    E3L; vaccinia viral vectors having reduced virulence
Virulence(microbial)...
    hypovirulence; vaccinia viral vectors having reduced virulence
Vaccinia virus...
    recombinant; vaccinia viral vectors having reduced virulence
Mutagenesis...
```

```
site-directed, deletion; vaccinia viral vectors having reduced
    virulence
Antiqens... Genetic engineering... Vaccines... Virus vectors...
    vaccinia viral vectors having reduced virulence
                                  - end of record -
?
                        (Item 2 from file: 399)
      Display 3/9/6
DIALOG(R) File 399:CA SEARCH(R)
(c) 2003 American Chemical Society. All rts. reserv.
               CA: 136(19)289954y
  136289954
                                      PATENT
  Construction of recombinant vaccinia viral vectors with incorporated orf
virus E3L gene and uses as a vaccine
  INVENTOR (AUTHOR): Jacobs, Bertram; Langland, Jeffrey; Vijaysri, Sangeetha
  LOCATION: USA
  ASSIGNEE: Arizona Board of Regents
 PATENT: United States ; US 6372455 B1 DATE: 20020416 APPLICATION: US 837997 (20010419)
  PAGES: 8 pp. CODEN: USXXAM LANGUAGE: English CLASS: 435069100;
C12P-021/06A; C12Q-001/70B; C12N-015/00B; C07H-021/04B
  SECTION:
CA203002 Biochemical Genetics
CA201XXX Pharmacology
CA210XXX MICROBIAL, ALGAL, AND FUNGAL BIOCHEMISTRY
CA215XXX Immunochemistry
  IDENTIFIERS: vaccinia virus E3L gene recombinant vector vaccine orf
                                     -more-
?
                         (Item 2 from file: 399)
      Display 3/9/6
DIALOG(R) File 399:CA SEARCH(R)
(c) 2003 American Chemical Society. All rts. reserv.
  DESCRIPTORS:
Genetic engineering... Orf virus... Vaccinia virus...
    construction of recombinant vaccinia viral vectors with incorporated
    orf virus E3L gene and uses as a vaccine
Gene, microbial...
    E3L; construction of recombinant vaccinia viral vectors with
    incorporated orf virus E3L gene and uses as a vaccine
Vaccines...
    recombinant WRorfE3L virus as; construction of recombinant vaccinia
    viral vectors with incorporated orf virus E3L gene and uses as a
    vaccine
Virus vectors...
    recombinant WRorfE3L; construction of recombinant vaccinia viral
    vectors with incorporated orf virus E3L gene and uses as a vaccine
Genetic element...
    regulatory, controlling expression of orf E3L gene; construction of
    recombinant vaccinia viral vectors with incorporated orf virus E3L gene
                                     -more-
?
                         (Item 2 from file: 399)
      Display 3/9/6
DIALOG(R) File 399:CA SEARCH(R)
(c) 2003 American Chemical Society. All rts. reserv.
    and uses as a vaccine
Gene, microbial...
    viral non-essential, of vaccinia virus; construction of recombinant
    vaccinia viral vectors with incorporated orf virus E3L gene and uses as
    a vaccine
  CAS REGISTRY NUMBERS:
408378-11-0 408378-12-1 unclaimed nucleotide sequence; construction of
```

recombinant vaccinia viral vectors with incorporated orf virus E3L gene and uses as a vaccine

- end of record -(Item 3 from file: 399) Display 3/9/7 DIALOG(R) File 399:CA SEARCH(R) (c) 2003 American Chemical Society. All rts. reserv. CA: 135(21)298757t PATENT 135298757 Screening methods for identifying viral proteins with interferon antagonizing functions and potential antiviral agents INVENTOR(AUTHOR): Basler, Christopher F.; Garcia-Sastre, Adolfo; Palese, Peter LOCATION: USA ASSIGNEE: Mount Sinai School of Medicine of New York University PATENT: PCT International; WO 200177394 Al DATE: 20011018 APPLICATION: WO 2001US11543 (20010410) *US PV195465 (20000410) PAGES: 76 pp. CODEN: PIXXD2 LANGUAGE: English CLASS: C12Q-001/70A; GO1N-033/53B DESIGNATED COUNTRIES: AE; AG; AL; AM; AT; AU; AZ; BA; BB; BG; BR; BY; BZ; CA; CH; CN; CO; CR; CU; CZ; DE; DK; DM; DZ; EE; ES; FI; GB; GD; GE; GH; GM; HR; HU; ID; IL; IN; IS; JP; KE; KG; KP; KR; KZ; LC; LK; LR; LS; LT; LU; LV; MA; MD; MG; MK; MN; MW; MX; MZ; NO; NZ; PL; PT; RO; RU; SD; SE; SG; SI; SK; SL; TJ; TM; TR; TT; TZ; UA; UG; US; UZ; VN; YU; ZA; ZW; AM; AZ; BY; KG; KZ; MD; RU; TJ; TM DESIGNATED REGIONAL: GH; GM; KE; LS; MW; MZ; SD -more-? (Item 3 from file: 399) Display 3/9/7 DIALOG(R) File 399:CA SEARCH(R) (c) 2003 American Chemical Society. All rts. reserv. ; SL; SZ; TZ; UG; ZW; AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LU; MC; NL; PT; SE; TR; BF; BJ; CF; CG; CI; CM; GA; GN; GW; ML; MR; NE; SN; TD; TG SECTION: CA201005 Pharmacology CA209XXX Biochemical Methods CA215XXX Immunochemistry IDENTIFIERS: screening virucide viral protein interferon antagonist, vaccine screening viral protein interferon antagonist, NS1 protein gene therapy DNA vaccination DESCRIPTORS: Interferons... .beta.; screening methods for identifying viral proteins with interferon antagonizing functions and potential antiviral agents Proteins, specific or class... E3L; screening methods for identifying viral proteins with interferon antagonizing functions and potential antiviral agents -more-(Item 3 from file: 399) Display 3/9/7 DIALOG(R) File 399:CA SEARCH(R) (c) 2003 American Chemical Society. All rts. reserv. Proteins, specific or class... green fluorescent; screening methods for identifying viral proteins with interferon antagonizing functions and potential antiviral agents Proteins, specific or class... ICP34.5 (infected-cell protein 34.5), HSV-1; screening methods for identifying viral proteins with interferon antagonizing functions and

Proteins, specific or class...
NS1 (nonstructural, 1); screening methods for identifying viral

potential antiviral agents

```
proteins with interferon antagonizing functions and potential antiviral
    agents
Proteins, specific or class...
    NS2 (nonstructural, 2); screening methods for identifying viral
    proteins with interferon antagonizing functions and potential antiviral
    agents
Antiviral agents... Drug screening... Ebola virus... Human herpesvirus 1...
Influenza A virus... Influenza B virus... Influenza C virus... Influenza
                                     -more-
?
      Display 3/9/7
                        (Item 3 from file: 399)
DIALOG(R) File 399:CA SEARCH(R)
(c) 2003 American Chemical Society. All rts. reserv.
virus... Interferons... Morbillivirus... Mutation... Paramyxovirus...
Pneumovirus... Promoter(genetic element)... Reporter gene... Respiratory
syncytial virus... Rhabdoviridae... Vaccinia virus... Virus...
    screening methods for identifying viral proteins with interferon
    antagonizing functions and potential antiviral agents
Proteins, specific or class...
    viral; screening methods for identifying viral proteins with interferon
    antagonizing functions and potential antiviral agents
Proteins, specific or class...
    VP35; screening methods for identifying viral proteins with interferon
    antagonizing functions and potential antiviral agents
                                 - end of record -
?
      Display 3/9/8
                        (Item 4 from file: 399)
DIALOG(R) File 399:CA SEARCH(R)
(c) 2003 American Chemical Society. All rts. reserv.
  129226634
               CA: 129(18)226634d
                                     PATENT
  Viral vectors having enhanced expression, and methods of making and uses
  INVENTOR (AUTHOR): Tartaglia, James; Cox, William I.; Gettig, Russell R.;
Martinez, Hector; Paoletti, Enzo; Pincus, Steven E.
  LOCATION: USA
  ASSIGNEE: Virogenetics Corp.
  PATENT: PCT International; WO 9840501 A1 DATE: 19980917
  APPLICATION: WO 98US2669 (19980213) *US 816155 (19970312)
  PAGES: 102 pp. CODEN: PIXXD2 LANGUAGE: English CLASS: C12N-015/64A;
C12N-015/67B; C12N-015/86B; A61K-048/00B DESIGNATED COUNTRIES: AU; CA; JP
  DESIGNATED REGIONAL: AT; BE; CH; DE; DK; ES; FI; FR; GB; GR; IE; IT; LU;
MC; NL; PT; SE
  SECTION:
CA203002 Biochemical Genetics
CA210XXX MICROBIAL, ALGAL, AND FUNGAL BIOCHEMISTRY
                                    -more-
      Display 3/9/8
                        (Item 4 from file: 399)
DIALOG(R) File 399:CA SEARCH(R)
(c) 2003 American Chemical Society. All rts. reserv.
CA215XXX Immunochemistry
CA263XXX Pharmaceuticals
  IDENTIFIERS: vaccinia poxvirus gene expression vector
  DESCRIPTORS:
Canarypox virus...
    ALVAC deriv. of; viral vaccinia and canarypox vectors having enhanced
    expression, and methods of making and uses thereof
Genes (microbial) ...
   AlL; viral vaccinia and canarypox vectors having enhanced expression,
```

```
and methods of making and uses thereof
Genes (microbial) ...
    A2L; viral vaccinia and canarypox vectors having enhanced expression,
    and methods of making and uses thereof
Genes (microbial) ...
    A7; viral vaccinia and canarypox vectors having enhanced expression,
    and methods of making and uses thereof
Genes (microbial) ...
                                     -more-
                        (Item 4 from file: 399)
      Display 3/9/8
DIALOG(R) File 399:CA SEARCH(R)
(c) 2003 American Chemical Society. All rts. reserv.
    D6; viral vaccinia and canarypox vectors having enhanced expression,
    and methods of making and uses thereof
Genes (microbial) ...
    EBER; viral vaccinia and canarypox vectors having enhanced expression,
    and methods of making and uses thereof
Genes (microbial) ...
    E3L; viral vaccinia and canarypox vectors having enhanced expression,
    and methods of making and uses thereof
Protein formation factors... Transcription factors...
    genes for; viral vaccinia and canarypox vectors having enhanced
    expression, and methods of making and uses thereof
Genes (microbial) ...
    G8R; viral vaccinia and canarypox vectors having enhanced expression,
    and methods of making and uses thereof
Genes (microbial) ...
    H4L; viral vaccinia and canarypox vectors having enhanced expression,
    and methods of making and uses thereof
                                     -more-
?
                        (Item 4 from file: 399)
      Display 3/9/8
DIALOG(R) File 399:CA SEARCH(R)
(c) 2003 American Chemical Society. All rts. reserv.
Genes (microbial) ...
    H5R; viral vaccinia and canarypox vectors having enhanced expression,
    and methods of making and uses thereof
Genes (microbial) ...
    K3L; viral vaccinia and canarypox vectors having enhanced expression,
    and methods of making and uses thereof
Vaccinia virus...
    NYVAC deriv. of; viral vaccinia and canarypox vectors having enhanced
    expression, and methods of making and uses thereof
Genes (microbial) ...
    TRBP; viral vaccinia and canarypox vectors having enhanced expression,
    and methods of making and uses thereof
Genes (microbial) ...
    VAI; viral vaccinia and canarypox vectors having enhanced expression,
    and methods of making and uses thereof
Virus vectors...
    vCP1452 and vCP1433; viral vaccinia and canarypox vectors having
                                     -more-
?
                         (Item 4 from file: 399)
      Display 3/9/8
DIALOG(R) File 399:CA SEARCH(R)
(c) 2003 American Chemical Society. All rts. reserv.
    enhanced expression, and methods of making and uses thereof
Gene expression... Immunity... Poxviridae... Promoter(genetic element)...
Vaccines...
```

viral vaccinia and canarypox vectors having enhanced expression, and methods of making and uses thereof

- end of record -Display 3/9/9 (Item 5 from file: 399) DIALOG(R) File 399:CA SEARCH(R) (c) 2003 American Chemical Society. All rts. reserv. CA: 127(25)342646s PATENT 127342646 Parapoxvirus vectors based on the orf virus and their use in vector INVENTOR (AUTHOR): Robinson, Anthony John; Lyttle, David James LOCATION: N. Z., ASSIGNEE: University of Otago; Robinson, Anthony John; Lyttle, David PATENT: PCT International; WO 9737031 Al DATE: 19971009 APPLICATION: WO 97NZ40 (19970327) *NZ 286284 (19960329) CODEN: PIXXD2 LANGUAGE: English CLASS: C12N-015/86A; PAGES: 72 pp. C12N-005/10B; A61K-039/275B DESIGNATED COUNTRIES: AL; AM; AT; AU; AZ; BA; BB; BG; BR; BY; CA; CH; CN; CU; CZ; DE; DK; EE; ES; FI; GB; GE; GH; HU; IL; IS; JP; KE; KG; KP; KR; KZ; LC; LK; LR; LS; LT; LU; LV; MD; MG; MK; MN; MW; MX; NO; NZ; PL; PT; RO; RU; SD; SE; SG; SI; SK; TJ; TM; TR; TT; UA; UG; US; UZ; VN; YU; AM; AZ; BY; KG; KZ; MD; RU; TJ; TM DESIGNATED REGIONAL: GH; KE ; LS; MW; SD; SZ; UG; AT; BE; CH; DE; DK; ES; FI; FR; GB; GR; IE; IT; LU; -more-? Display 3/9/9 (Item 5 from file: 399) DIALOG(R) File 399:CA SEARCH(R) (c) 2003 American Chemical Society. All rts. reserv. MC; NL; PT; SE; BF; BJ; CF; CG; CI; CM; GA; GN; ML; MR; NE; SN; TD; TG SECTION: CA203002 Biochemical Genetics CA201XXX Pharmacology CA215XXX Immunochemistry IDENTIFIERS: parapoxvirus vaccine expression vector, orf virus promoter expression vector vaccine DESCRIPTORS: Echinococcus granulosus... Haemonchus... Ostertagia... Taenia ovis... Trichostrongylus... antigen genes of, in parapoxvirus vaccine vectors; parapoxvirus vectors based on orf virus and their use in vector vaccines Human immunodeficiency virus... env gene of, in parapoxvirus vaccine vectors; parapoxvirus vectors based on orf virus and their use in vector vaccines Promoter(genetic element)... E1L, of orf virus, expression of foreign genes from; parapoxvirus -more-Display 3/9/9 (Item 5 from file: 399) DIALOG(R) File 399:CA SEARCH(R) (c) 2003 American Chemical Society. All rts. reserv. vectors based on orf virus and their use in vector vaccines Genes (microbial) ... E3L, as non-essential for orf virus replication; parapoxvirus vectors based on orf virus and their use in vector vaccines Promoter(genetic element)... F1L, of orf virus, expression of foreign genes from; parapoxvirus

F3L, of orf virus, expression of foreign genes from; parapoxvirus

vectors based on orf virus and their use in vector vaccines

Promoter (genetic element) ...

```
vectors based on orf virus and their use in vector vaccines
Antigens... Interferon .gamma.... Interleukin 1.beta.... Interleukin 12...
Interleukin 1... Interleukin 2... Interleukin 4... Interleukin 5...
Interleukin 6...
    gene for, in parapoxvirus vaccine vectors; parapoxvirus vectors based
    on orf virus and their use in vector vaccines
Human herpesvirus...
    glycoprotein gene of, in parapoxvirus vectors; parapoxvirus vectors
                                    -more-
                        (Item 5 from file: 399)
      Display 3/9/9
DIALOG(R) File 399:CA SEARCH(R)
(c) 2003 American Chemical Society. All rts. reserv.
    based on orf virus and their use in vector vaccines
Glycoproteins(specific proteins and subclasses)...
    herpes simplex virus gene for, in parapoxvirus vaccine vectors;
    parapoxvirus vectors based on orf virus and their use in vector
RFLP(restriction fragment length polymorphism)...
    in orf virus genomes; parapoxvirus vectors based on orf virus and their
    use in vector vaccines
env gene (microbial) ...
    in parapoxvirus vaccine vectors; parapoxvirus vectors based on orf
    virus and their use in vector vaccines
Promoter(genetic element)...
    late, of orf virus; parapoxvirus vectors based on orf virus and their
    use in vector vaccines
Early promoter(genetic element)... Promoter(genetic element)...
    of orf virus; parapoxvirus vectors based on orf virus and their use in
    vector vaccines
                                    -more-
      Display 3/9/9
                        (Item 5 from file: 399)
DIALOG(R) File 399:CA SEARCH(R)
(c) 2003 American Chemical Society. All rts. reserv.
Orf virus... Parapoxvirus...
    parapoxvirus vectors based on orf virus and their use in vector
    vaccines
Testis...
    propagation of parapoxvirus vectors in cultured cells of; parapoxvirus
    vectors based on orf virus and their use in vector vaccines
Plasmid vectors...
    pTvec50lac-1, transfer vector for orf virus; parapoxvirus vectors based
    on orf virus and their use in vector vaccines
Plasmid vectors...
    pTvec50lac-2, transfer vector for orf virus; parapoxvirus vectors based
    on orf virus and their use in vector vaccines
Genetic mapping...
    restriction, of orf virus genomes; parapoxvirus vectors based on orf
    virus and their use in vector vaccines
Vaccines...
    vector; parapoxvirus vectors based on orf virus and their use in vector
                                    -more-
      Display 3/9/9
                        (Item 5 from file: 399)
DIALOG(R) File 399:CA SEARCH(R)
(c) 2003 American Chemical Society. All rts. reserv.
    vaccines
  CAS REGISTRY NUMBERS:
198229-79-7 B1L early promoter of orf virus; parapoxvirus vectors based on
```

```
orf virus and their use in vector vaccines
198229-85-5 B2L late promoter of orf virus; parapoxvirus vectors based on
    orf virus and their use in vector vaccines
198229-80-0 B3L early promoter of orf virus; parapoxvirus vectors based on
    orf virus and their use in vector vaccines
198229-89-9 C1R late promoter of orf virus; parapoxvirus vectors based on
    orf virus and their use in vector vaccines
198229-76-4 E1L early promoter of orf virus; parapoxvirus vectors based on
    orf virus and their use in vector vaccines
198229-75-3 E2L early promoter of orf virus; parapoxvirus vectors based on
    orf virus and their use in vector vaccines
198229-74-2 E3L early promoter of orf virus; parapoxvirus vectors based on
    orf virus and their use in vector vaccines .
198229-81-1 F1L late promoter of orf virus; parapoxvirus vectors based on
                                    -more-
                        (Item 5 from file: 399)
      Display 3/9/9
DIALOG(R) File 399:CA SEARCH(R)
(c) 2003 American Chemical Society. All rts. reserv.
    orf virus and their use in vector vaccines
198229-82-2 F2L late promoter of orf virus; parapoxvirus vectors based on
    orf virus and their use in vector vaccines
198229-83-3 F3R late promoter of orf virus; parapoxvirus vectors based on
    orf virus and their use in vector vaccines
198229-84-4 F4R late promoter of orf virus; parapoxvirus vectors based on
    orf virus and their use in vector vaccines
198229-77-5 G1L early promoter of orf virus; parapoxvirus vectors based on
    orf virus and their use in vector vaccines
198229-78-6 G2L early promoter of orf virus; parapoxvirus vectors based on
    orf virus and their use in vector vaccines
198229-86-6 HE2L late promoter of orf virus; parapoxvirus vectors based on
    orf virus and their use in vector vaccines
198229-88-8 HI1L late promoter of orf virus; parapoxvirus vectors based on
    orf virus and their use in vector vaccines
198229-87-7 HI2L late promoter of orf virus; parapoxvirus vectors based on
    orf virus and their use in vector vaccines
                                    -more-
?
      Display 3/9/9
                        (Item 5 from file: 399)
DIALOG(R) File 399:CA SEARCH(R)
(c) 2003 American Chemical Society. All rts. reserv.
198228-79-4 198228-80-7 198228-81-8 198228-82-9 198228-83-0
    198228-84-1 nucleotide sequence, non-essential region for cloning of
    foreign genes; parapoxvirus vectors based on orf virus and their use in
    vector vaccines
                                 - end of record -
      Display 3/9/10
                         (Item 1 from file: 34)
DIALOG(R) File 34: SciSearch(R) Cited Ref Sci
(c) 2003 Inst for Sci Info. All rts. reserv.
          Genuine Article#: YK656
                                     Number of References: 42
Title: Host range and cytopathogenicity of the highly attenuated MVA
    strain of vaccinia virus: Propagation and generation of recombinant
    viruses in a nonhuman mammalian cell line
Author(s): Carroll MW; Moss B (REPRINT)
Corporate Source: NIAID, VIRAL DIS LAB, NIH/BETHESDA//MD/20892 (REPRINT);
    NIAID, VIRAL DIS LAB, NIH/BETHESDA//MD/20892
Journal: VIROLOGY, 1997, V238, N2 (NOV 24), P198-211
ISSN: 0042-6822 Publication date: 19971124
```

Publisher: ACADEMIC PRESS INC JNL-COMP SUBSCRIPTIONS, 525 B ST, STE 1900,

SAN DIEGO, CA 92101-4495

Language: English Document Type: ARTICLE

Geographic Location: USA

Subfile: CC LIFE--Current Contents, Life Sciences

Journal Subject Category: VIROLOGY

Abstract: Modified vaccinia virus Ankara (MVA), attenuated by over

-more-

?

Display 3/9/10 (Item 1 from file: 34) DIALOG(R)File 34:SciSearch(R) Cited Ref Sci (c) 2003 Inst for Sci Info. All rts. reserv.

500 passages in primary chick embyro fibroblasts (CEF), is presently being used as a safe expression vector. We compared the host ranges of MVA and the parental Ankara strain in CEF and 15 permanent cell lines. The cells could be grouped into three categories: permissive, semipermissive, and nonpermissive. For MVA, the permissive category consisted of primary CEF, a quail cell line derived from QT6, and the Syrian hamster cell line BHK-21. Only in BHK-21 cells did the Virus